CLAIMS

What is claimed is:

1.   A private communications network comprising:

at least one communications server, said at least one communications server being an originating server with a plurality of connected communications devices, calls being placed from ones of said connected communications devices by entering a called party number, said called party number being provided to said originating server, said originating server parsing any identified carrier identification code (CIC) from said called party number, parsed called party numbers having said CIC parsed therefrom, said originating server placing any parsed said CIC and said parsed called party numbers on a private network of connected servers; and

at least one connected server being a public network gateway server receiving said parsed called party number from said network and receiving said parsed CIC independent of receipt of said parsed called party number, said public network gateway server passing said parsed called party number to an appropriate carrier network, whereby a user entering a number at one said communications device is connected to a called party over said carrier network.

2.   A private communications network as in claim 1 wherein said originating server comprises:

a device handler interfacing connected communications devices with said originating server;

a CIC parser stripping carrier access codes (CACs) from said called party numbers to produce said parsed called party numbers and stripping each said CIC from said CACs;

a CIC conversion unit transporting said stripped CICs over said private communications network to said public network gateway server; and

a trunk handler interfacing said originating server with said private network.

3.   A private communications network as in claim 2, said originating server further comprising:

a digit analysis unit analyzing incoming called party numbers from connected said communications devices and identifying CICs in said incoming called party numbers; and

a least cost routing dial plan receiving said parsed called party numbers and 5 assigning routes to received said parsed called party numbers.

4. A private communications network as in claim 3 wherein said originating server further comprises:

a least cost routing unit identifying whether each of said called party numbers 10 is an out-of-network number.

5. A private communications network as in claim 1 wherein the public network gateway server comprises:

a trunk handler interfacing said private network and said public network with 15 said public network gateway server; and

a CIC conversion unit converting any CIC received from said public network to a CIC usable on said public network.

6. A private communications network as in claim 5 wherein the public network 20 gateway server further comprises:

a device handler interfacing said public network gateway server with a second plurality of connected communications devices; and

a CIC parser parsing CICs from incoming called party numbers from said device handler, parsed called party numbers including any said incoming called party 25 number having said CIC parsed therefrom in said public network gateway server.

7. A private communications network as in claim 6 wherein said public network gateway server further comprises:

a digit analysis unit identifying called party numbers including a CIC, 30 identified said called party numbers being parsed by said CIC parser; and

a least cost routing dial plan containing parsed called party numbers and assigning routes to said parsed called party numbers.

8.   A private communications network as in claim 7 wherein said public network gateway server further comprises a prefix logic unit assigning prefixes to selected ones of said called party numbers and said parsed called party numbers.

9.   A private communications network as in claim 5 wherein the CIC conversion unit formats CICs for an appropriate public network trunk type.

10.   A private communications network as in claim 9 wherein the public network trunk type is ISDN.

11.   A private communications network as in claim 9 wherein the public network trunk type is analog.

12.   A method of operating a private communications network, said method comprising the steps of:

   a) receiving a called party number from a connected private network user;

   b) analyzing said called party number for a carrier identification code (CIC);

   c) parsing any identified CIC from said incoming called party number to form a parsed called party number;

   d) passing called numbers to a public network gateway server, said called numbers including incoming called party numbers and parsed called party numbers;

   e) routing said identified CIC to said public network gateway server;

   f) formatting said routed CIC for a public network trunk type; and

   g) placing said call over a public network.

13.   A method as in claim 12 wherein said called party number is analyzed in step (b) for a carrier access code (CAC), CICs being included in CACs.

14.   A method as in claim 13 wherein step (c) of parsing any identified CIC comprises:

   i)   stripping an identified CAC from said called party number; and

   ii)   discarding a CAC prefix from said CAC.

15.   A method as in claim 12 wherein said identified CIC is routed to said public network gateway server in step (e) substantially coincident with passing a corresponding parsed called party number in step (d), said CIC being routed to said public network gateway server in a signaling channel.

16.   A method as in claim 15 wherein said identified CIC is sent in a QSIG trunk.

17.   A method as in claim 12 wherein said private network user is connected to said public network gateway server.

18.   A method as in claim 12 wherein said private network user is connected to a communications server remotely located and connected over said private communications network to said public network gateway server.

19.   A method as in claim 12 wherein when a CIC is not found in step (b) and said called party number is a long distance call, a CIC is provided and formatted for said public network trunk type.

20.   A method as in claim 12 wherein said formatted CIC is sent in a called party digit string sequence.